plants were inhabitants of swamps, and it is the author's belief that the toxic theory, which he has done so much to develop, explains these ancient xerophytic structures as well as it does the xerophytic structures of modern bog plants.—H. C. COWLES.

Seedling anatomy.—Miss THOMAS[20] has added a large body of facts to our knowledge of seedling anatomy, having investigated 150 species belonging to Ranales, Rhoeadales, and Rosales, about half of them belonging to Ranales. She has reached some interesting conclusions as to the phylogenetic relations of the various anatomical conditions, and is inclined to believe that seedling anatomy may be of service in indicating relationships, in spite of the recent tendency to discount it. It would be of interest if Miss THOMAS should "summarize or analyze" the results obtained thus far, and give us a profitable perspective.—J. M. C.

Scinaia.—SETCHELL[21] has studied the species of red algae which have usually passed for *Scinaia*. As a result he has broken up what seems to be a plexus of forms. After a description of the morphology of the group, the taxonomic presentation includes *Scinaia*, with 11 species, 5 of which are new; *Gloiophloea*, with 7 species, 4 of which are new; and *Pseudoscinaia*, a new genus with two species. The discussion of geographical distribution of this group of forms is particularly suggestive, a subject to which the author has been giving much attention.—J. M. C.

Mutation in Egyptian cotton.—KEARNEY[22] has contributed to the literature of mutation by describing the behavior of Egyptian cotton, which exhibits the tendency characterizing *Oenothera Lamarckiana*, new characters appearing at different times and in different places. The origin of this cotton is obscure, but it seems certain that the varieties now grown are of mixed ancestry. If this be true, it would confirm the view that the tendency to produce mutants is a result of remote or complex hybridization.—J. M. C.

Elementary species of Onagra.—BARTLETT[23] has published 12 new elementary species of the subgenus *Onagra*, 5 of them belonging to the aggregate called *O. biennis* in our manuals, 2 of them being allies of *O. parviflora*, and the remaining 5 being included in the recent descriptions of *O. muricata*, which in

[20] THOMAS, E. N., Seedling anatomy of Ranales, Rhoeadales, and Rosales. Ann. Botany **28**:695–733. *pls. 50, 51. figs. 43.* 1914.

[21] SETCHELL, W. A., The *Scinaia* assemblage. Univ. Calif. Publ. Bot. **6**:79–152. *pls. 10–16.* 1914.

[22] KEARNEY, THOMAS H., Mutation in Egyptian cotton. Jour. Agric. Research **2**:287–302. *pls. 17–25.* 1914.

[23] BARTLETT, H. H., Twelve elementary species of *Onagra*. Cybele Columbiana **1**:37–56. *pls. 1–5.* 1914.